

ABSTRACT

In a liquid processing apparatus for forming a coating film on a polygonal substrate by spin coating in an ambient with a descending clean air flow, a spin chuck includes a support plate for substantially horizontally supporting the substrate thereon. Air flow control members are provided on the spin chuck such that the air flow control member being disposed adjacent to a periphery of the polygonal substrate supported on the spin chuck, wherein the air flow control member is not provided near corner portions of the substrate supported on the spin chuck. The liquid processing apparatus may includes an air flow regulation ring which is provided with an air inlet having an opening surrounding an outer periphery of the air flow control member, wherein the air inlet communicates with the exhaust unit.